



survey

The data acquisition process & survey progress



INSTITUTO DE ASTRONOMIA,
GEOFÍSICA E CIÊNCIAS
ATMOSFÉRICAS

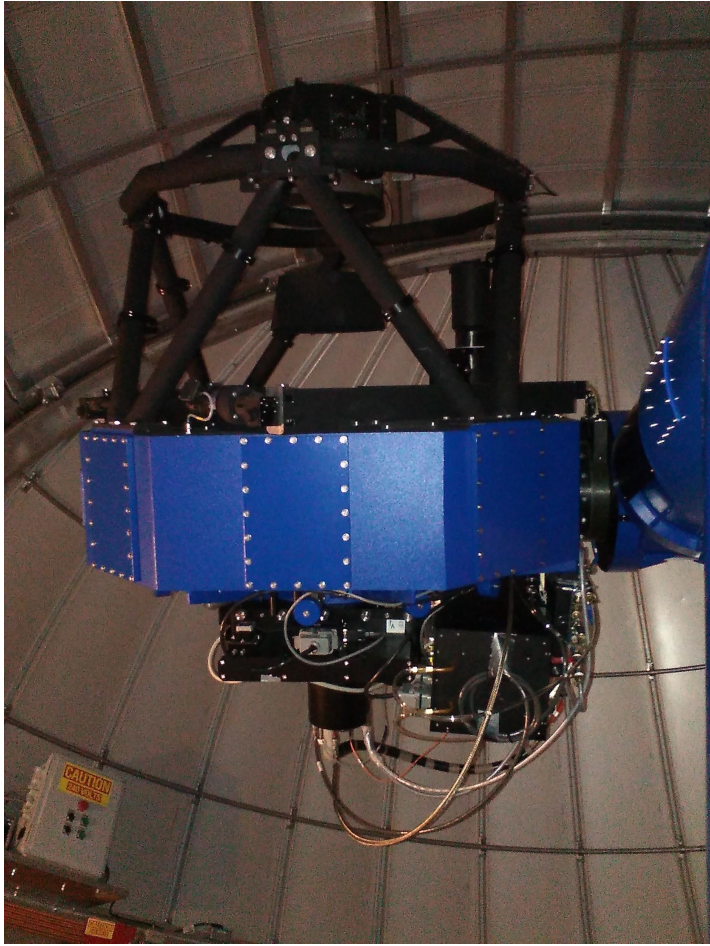
Fábio R. Herpich - IAG/USP

e-mail: fabiorafaelh@gmail.com



SÃO PAULO RESEARCH FOUNDATION

I, robot



T80SCam

- 9232×9216 10 μ m-pixel array
- FoV of the camera is 1.4×1.4 deg
- 16 amplifiers organized in an 8×2 array

Search

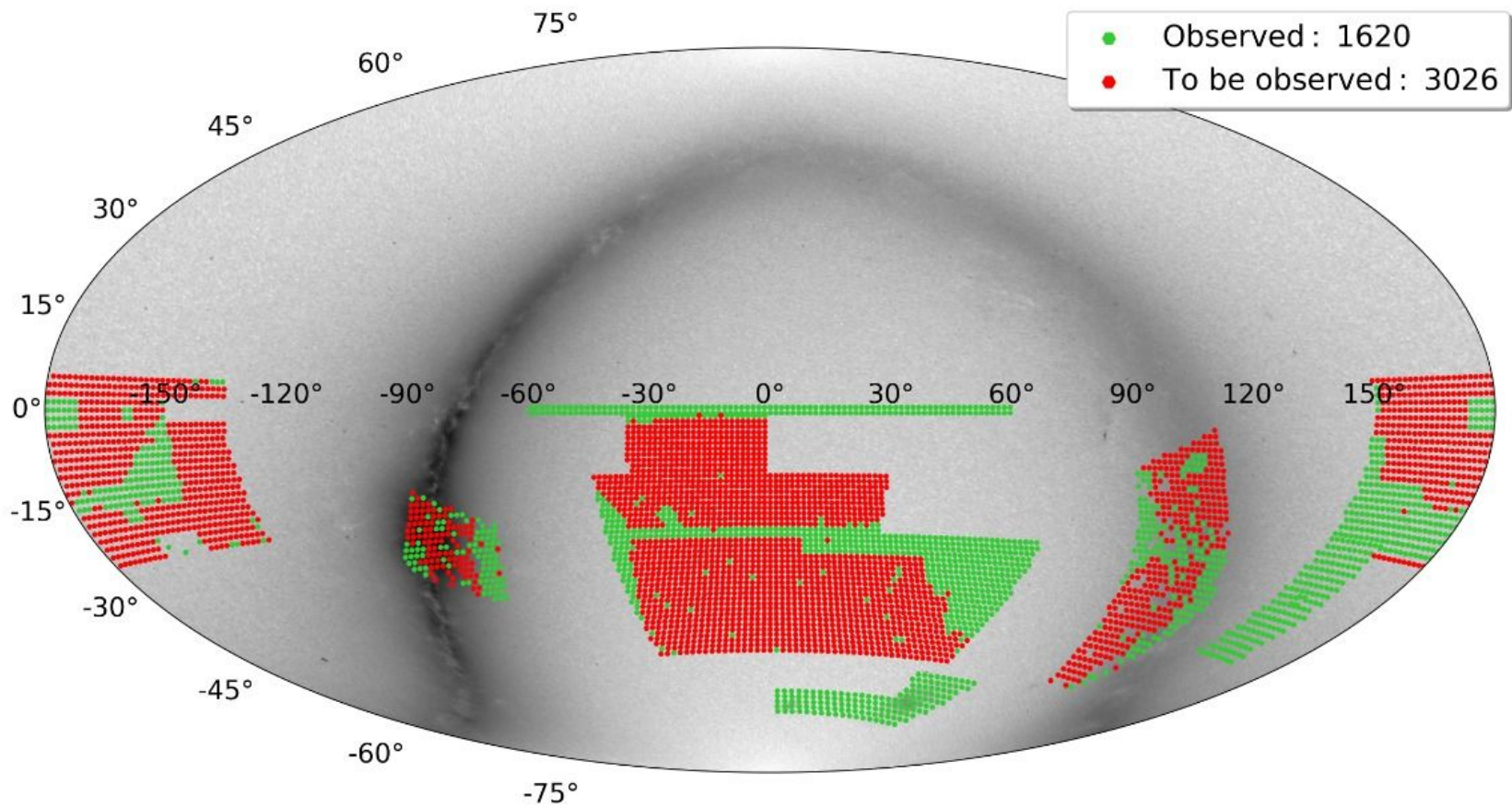
- TM** T80S Manager 10:00 PM
22 file(s) in 20201214
- LA** lagoa 9:59 PM
t80s-yye2 - Finished coadd... **18**
- T8** t80s 2:51 PM
Running action "GetAllSky".

- TM** T80S Manager 8:33:19 PM
Opening Telescope cover.
- TM** T80S Manager 8:33:20 PM
Running /mnt/public/t80s_scripts/scripts/switch_lamp_off.sh
- TM** T80S Manager 8:33:29 PM
Scheduler configured. Restart it to run with the new database.
- TM** T80S Manager 8:33:30 PM
Starting scheduler.

Unread messages

- TM** T80S Manager 9:56:47 PM
Opening dome flap...
- TM** T80S Manager 9:57:51 PM
Activating dome tracking.
- TM** T80S Manager 9:57:52 PM
Dome fan stopped
- TM** T80S Manager 9:57:53 PM
Dome fan stopped
- TM** T80S Manager 9:57:53 PM
Opening Telescope cover.
- TM** T80S Manager 9:57:54 PM
Telescope fan stopped
- TM** T80S Manager 9:57:58 PM
Running /mnt/public/t80s_scripts/scripts/switch_lamp_off.sh
- TM** T80S Manager 9:58:06 PM
Starting robots and waking it up.
- TM** T80S Manager 10:00:03 PM
22 file(s) in 20201214

MUTE



Search

- TM** T80S Manager 10:00 PM
22 file(s) in 20201214
- LA** lagoo 9:59 PM
t80s-yye2 - Finished coadd... **18**
- T8** t80s 2:51 PM
Running action "GetAllSky".

- TM** T80S Manager
Opening Telescope cover.
- TM** T80S Manager
Running /mnt/public/t80s_scripts/scripts/switc
- TM** T80S Manager
Scheduler configured. Restart it to run with th
- TM** T80S Manager
Starting scheduler.

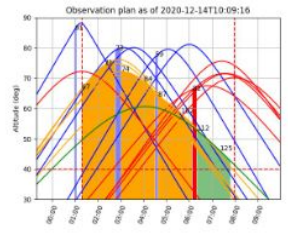
Unread messages

- TM** T80S Manager
Opening dome flap...
- TM** T80S Manager
Activating dome tracking.
- TM** T80S Manager
Dome fan stopped
- TM** T80S Manager
Dome fan stopped
- TM** T80S Manager
Opening Telescope cover.
- TM** T80S Manager
Telescope fan stopped
- TM** T80S Manager
Running /mnt/public/t80s_scripts/scripts/switc
- TM** T80S Manager
Starting robots and waking it up.
- TM** T80S Manager
22 file(s) in 20201214

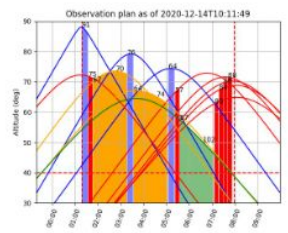
MUTE



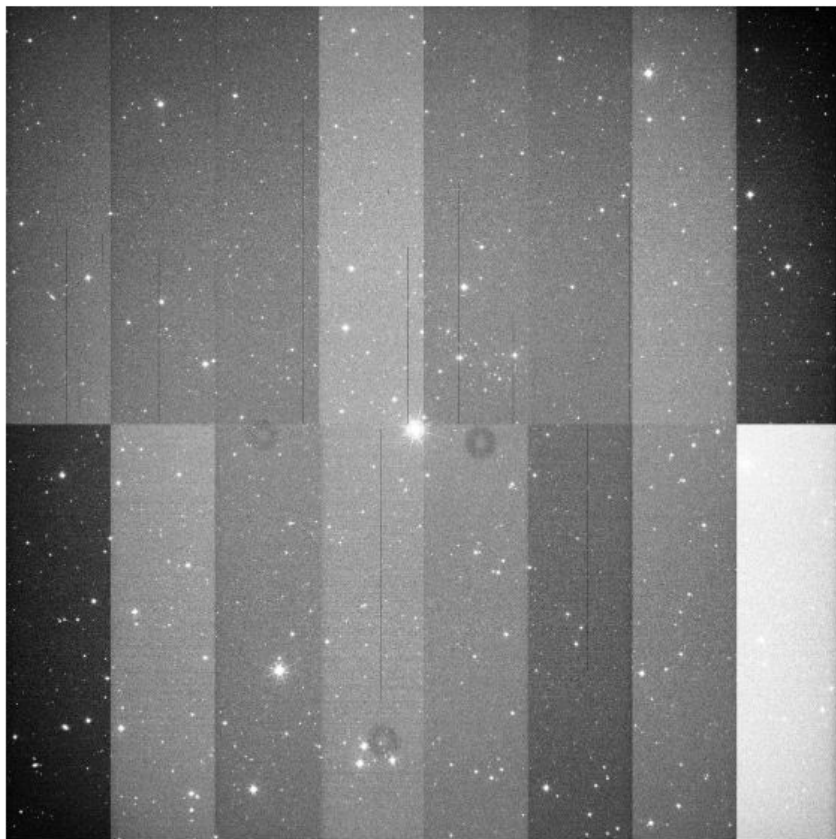
- TM** T80S Manager 6:48:48 AM
Lamp switched on
- TM** T80S Manager 7:08:51 AM
Running /mnt/public/t80s_scripts/scripts/plan_robobs.sh
- TM** T80S Manager 7:13:40 AM
Last night observations
- TM** T80S Manager 7:13:43 AM



- TM** T80S Manager 7:13:43 AM
Tonight observations plan
- TM** T80S Manager 7:13:45 AM



Modern times



Loaded: 2020-11-01 21:30:12

User comment:

Capture details

Photometry

All

Project	
Type	SCIE
Filter	R
Date	2020-11-02 0:29:26
RA	349.12117 (23:16:29.08)
DEC	-23.23333 (-23:13:59.99)
Air Mass	1.02314
Observer	
Exposition Time	10.00
Readout Mode	
DPRCATG	OBJECT
DPRTYPE	OBJECT
CCD Temp	-117.60000
Seeing (DIMM)	

Download Fits



Flag image

 Logarithmic render Reverse

Close

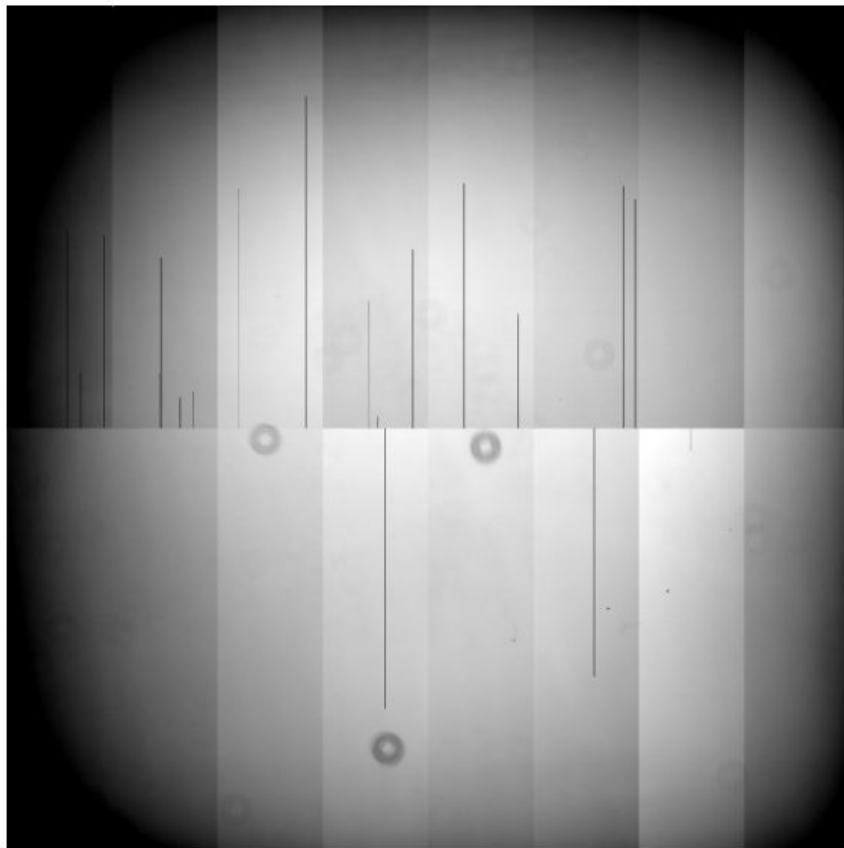
[Main](#)[Cal. Frames](#)[Astrom.](#)[Ing.](#)[Phot.Calib](#)[All](#)

Filter	R
Img. Type	SCIE
Date Obs.	2020-11-02 0:29:26
RA	349.12117 (23:16:29.08)
DEC	-23.23333 (-23:13:59.99)
Exp. Time	10.00
Readout	
Proc. Mode	Normal
Corrections	Overscan/Trimmed/Bias/Flat
Exit Status	OK
FWHM Mean	1.12651
FWHMG	1.197
FWHMG Rms	0.082
Valid	
User Comment	

[Downloads](#) ▾[Plots](#) ▾

Logarithmic ▾

 Reverse Back Level[Raw Detail](#)[Flag Raw](#)[Flag reduction](#)[Close](#)



	Main	Combined	BP Mask	All
Is Valid		Valid		
Image Type		FLAS		
Date		2020-11-30		
Valid From		2020-11-01T12:00:00		
Valid To		2020-11-25T12:00:00		
ADU Level		1.067 rms: 0.0196		
Noise		0.0090 rms: 0.0004		
Filter		R		
Readout				
Selected		54		
Combined		54		
Exit Status		Complete		
User comment				

Downloads ▾

Graphs ▾



Stability graph

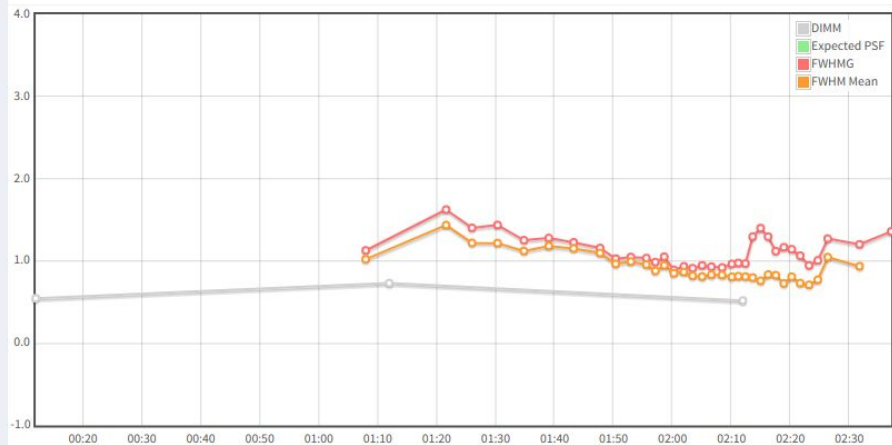
Flag image

Close

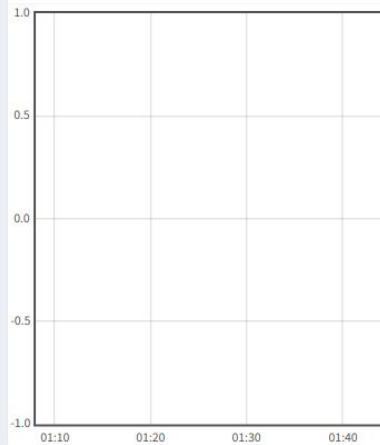
Seven

PSF - Seeing (DIMM Monitor)

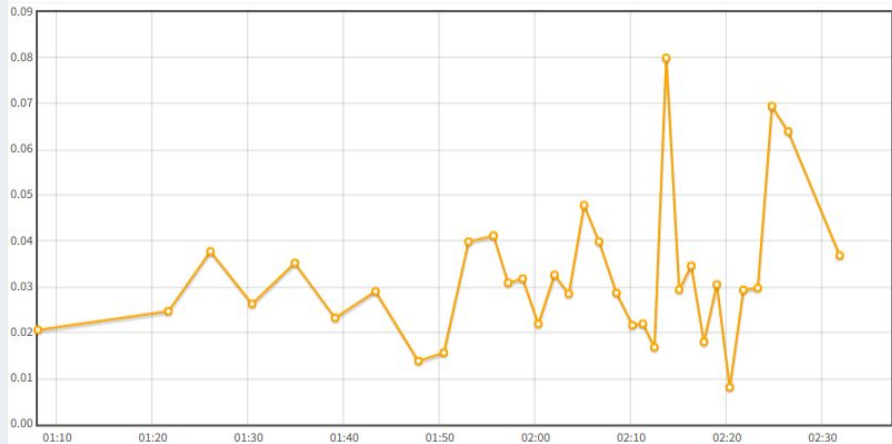
+ - Reset



Background



Ellipticity (Ellipticity_Mean)



Night: 2020-12-14

Filter:

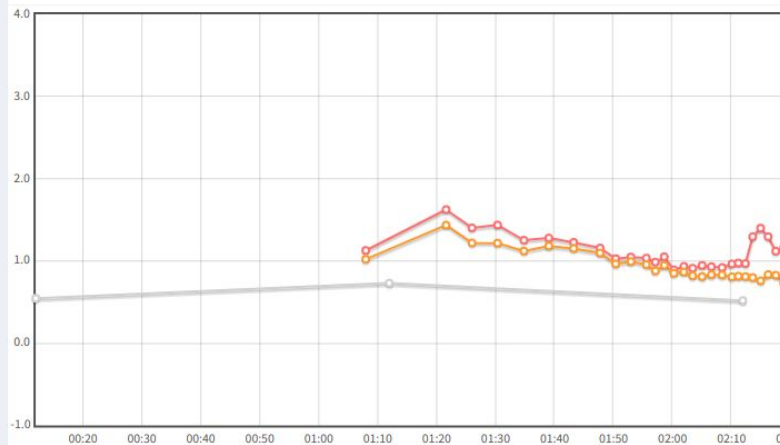
Click on a point in the graphs to see its associated image reduction.
Graphs can be moved and zoomed with the mouse.

[View Seeing full graph](#)

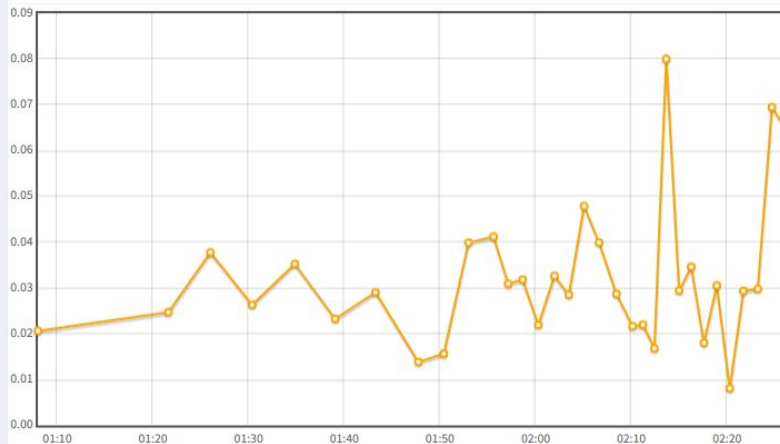
[View SQM Background full graph](#)

[View METEO full graph \(on new Tab\)](#)

PSF - Seeing (DIMM Monitor)



Ellipticity (Ellipticity_Mean)



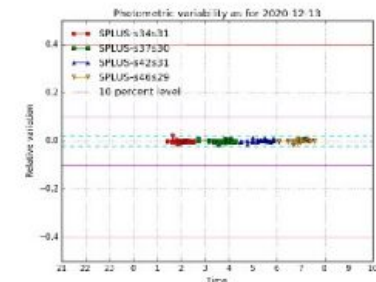
T80S Manager

Night quality as for 2020-12-13

5 10:02:05 AM



T80S Manager



5 10:02:07 AM



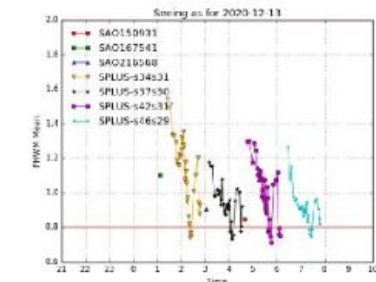
T80S Manager

Seeing as for 2020-12-13

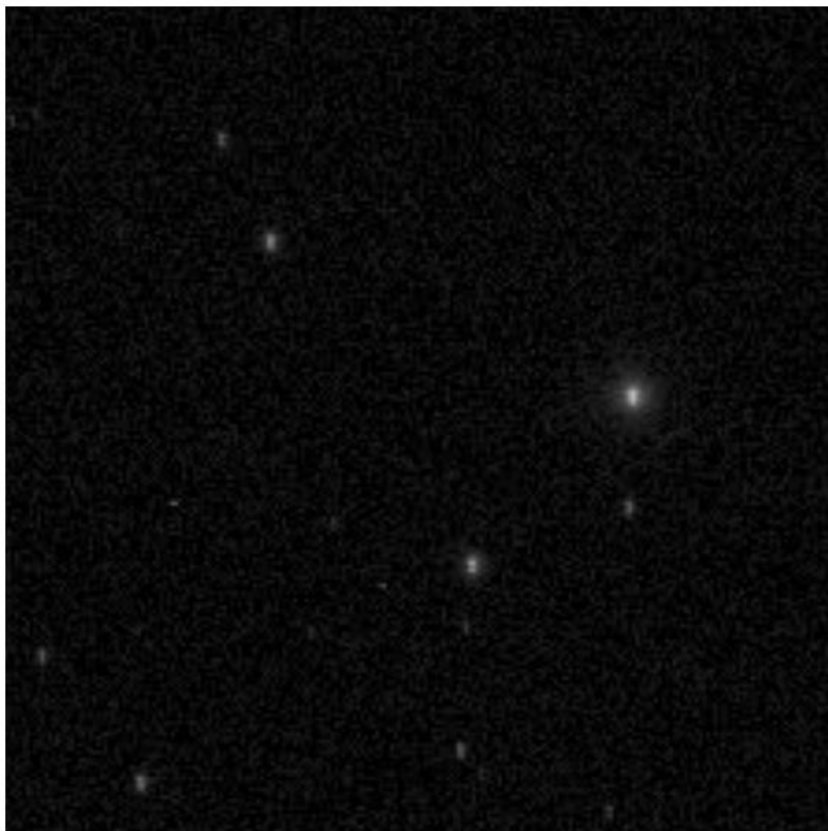
5 10:02:08 AM



T80S Manager



5 10:02:11 AM

[Main](#)[Cal. Frames](#)[Lvl](#)[Astrom.](#)[Ing.](#)[Phot.Calib](#)[All](#)

Filter	F410
Img. Type	SCIE
Date Obs.	2020-12-14 3:42:17
RA	58.00038 (3:52:00.09)
DEC	-47.97122 (-47:58:16.39)
Exp. Time	59.00
Readout	
Proc. Mode	Pre-processing
Corrections	Overscan/Trimmed/Bias/Flat
Exit Status	OK
FWHM Mean	
FWHMG	-1.000
FWHMG Rms	-1.000
Valid	
User Comment	

[Downloads](#)[Plots](#)[Logarithmic](#)

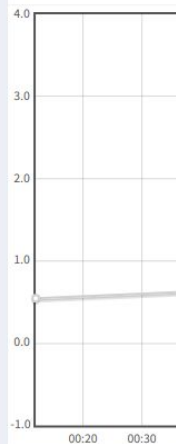
Reverse



Back Level

[Raw Detail](#)[Flag Raw](#)[Flag reduction](#)[Close](#)

PSF - Seeing (DIM)



Ellipticity (Ellipti

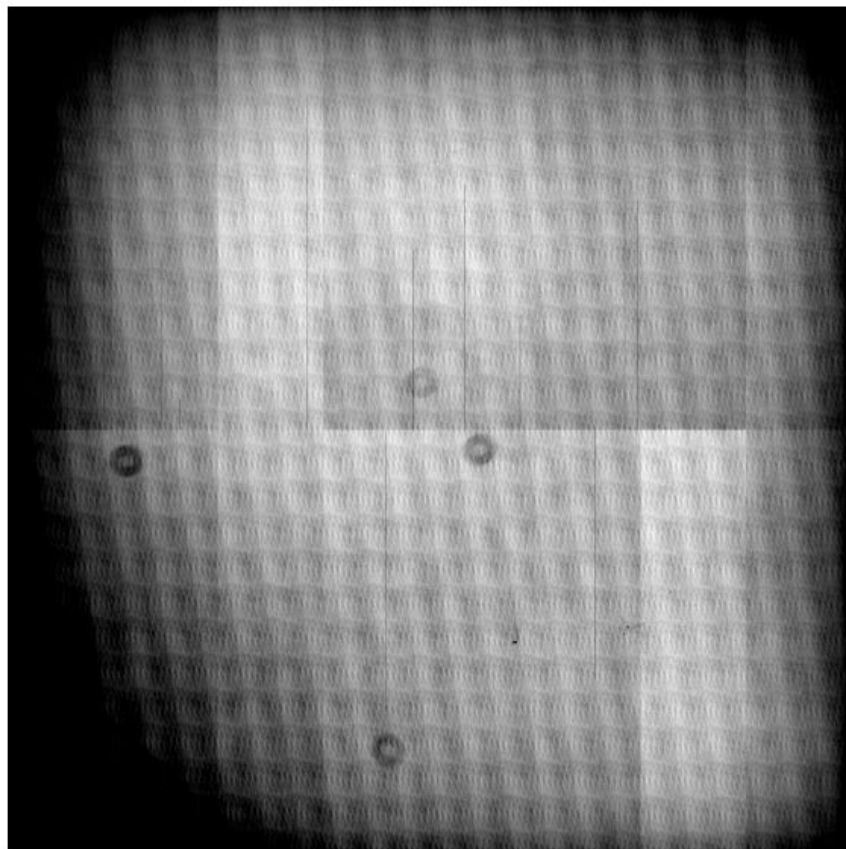


Image invalidated by user

Loaded: 2020-12-14 11:01:42

2:05 AM

User comment: [patricia] counts too high/low

Capture details

Photometry

All

2:07 AM

ADU Level	8685.43
ADU Level RMS	191.24
Noise	108.80
Noise RMS	5.53
DIMM FWHM	
OPAC FWHM	
Quality Flag	

2:08 AM

2:11 AM

Download Fits



Flag image



Logarithmic render



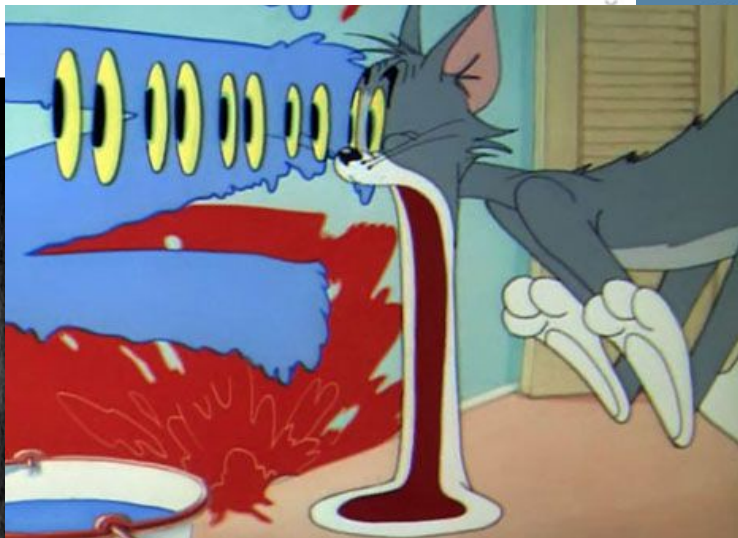
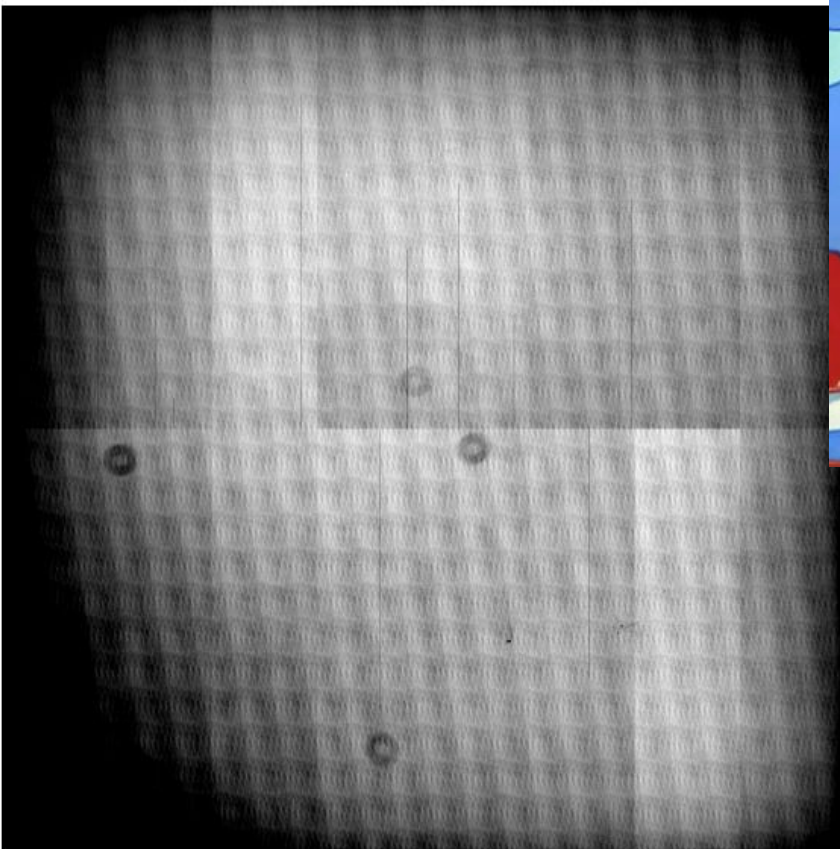
Reverse

Close

PSF - Seeing (DI)



Ellipticity (Ellipti)



Quality Flag

2:08 AM

2:11 AM

Download Fits



Flag image



Logarithmic render



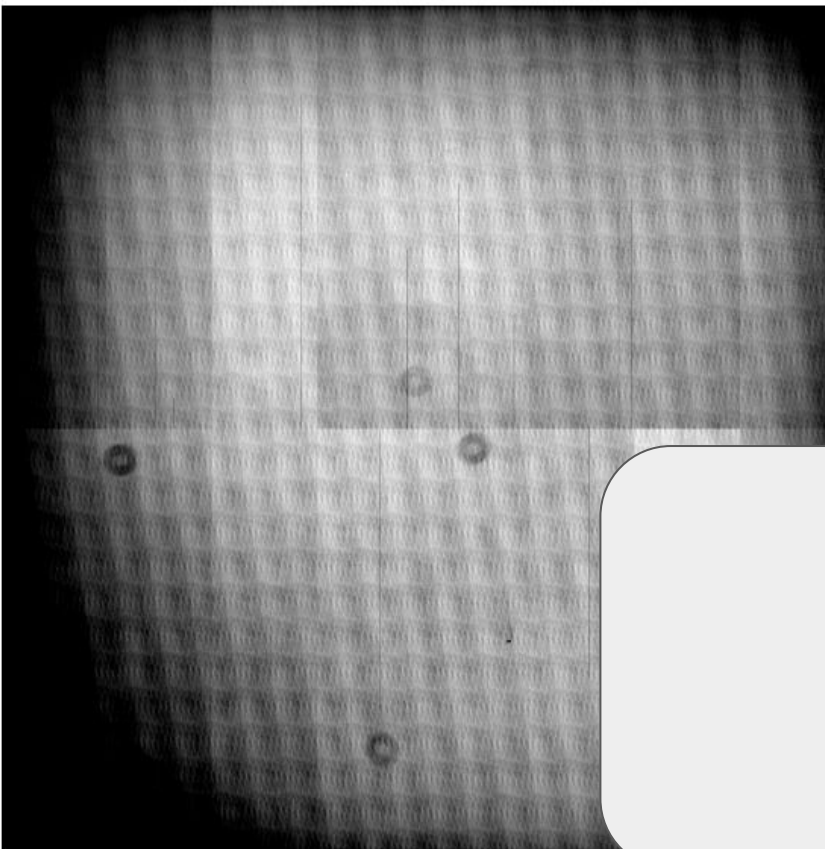
Reverse

Close

PSF - Seeing (DI)



Ellipticity (Ellipti)



Patricia
Luis
Fábio

2:08 AM

2:11 AM

Download Fits



Flag image



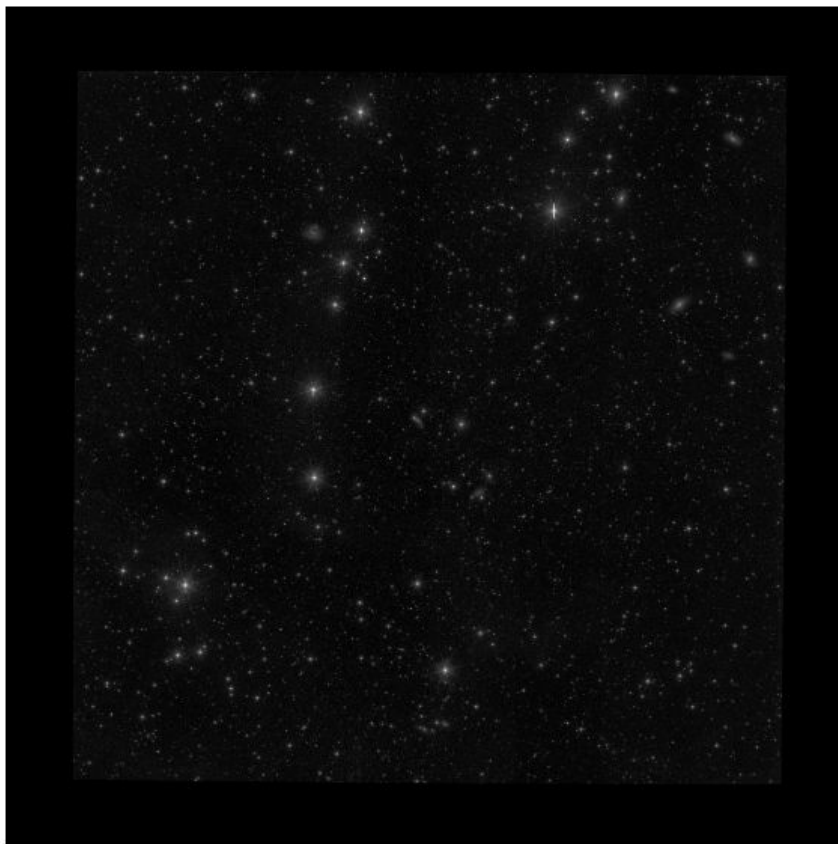
Logarithmic render



Reverse

Close





Main Combined Phot.Calib Definition

All

Date	2020-04-04 23:00:05
Selected	3
Filtered	3
Combined	3
ADU Level	0.000 (RMS: 0.005)
Noise	0.1533 (RMS: 0.0106)
T. Exposed	120.00
Efec. Time	119.61
Exp. Time	1.00
Exit Status	Complete
FWHMG	1.146 (RMS: 0.121)
Quality Flag	
Valid	
User Comment	

Downloads ▾

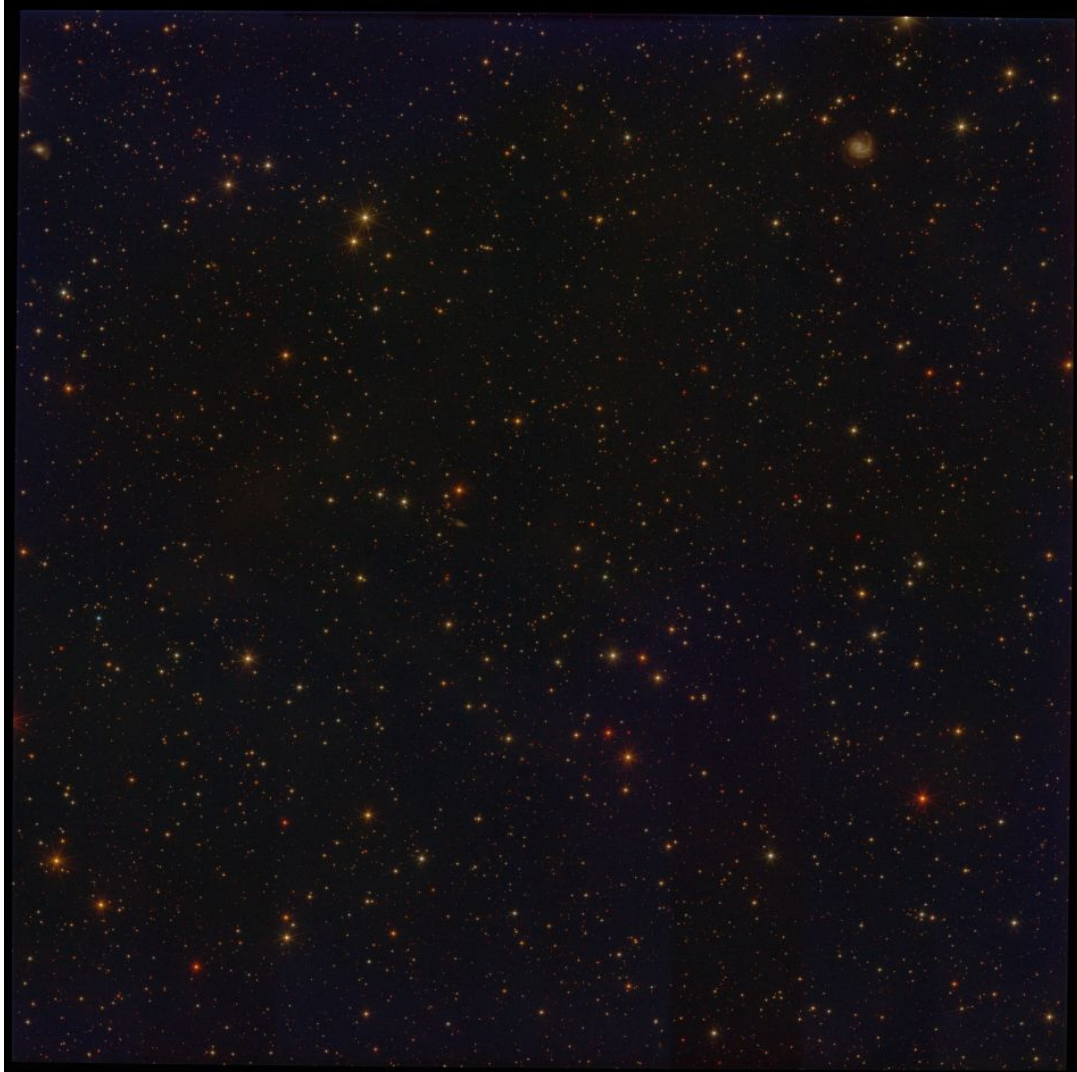
Plots ▾



Linear render

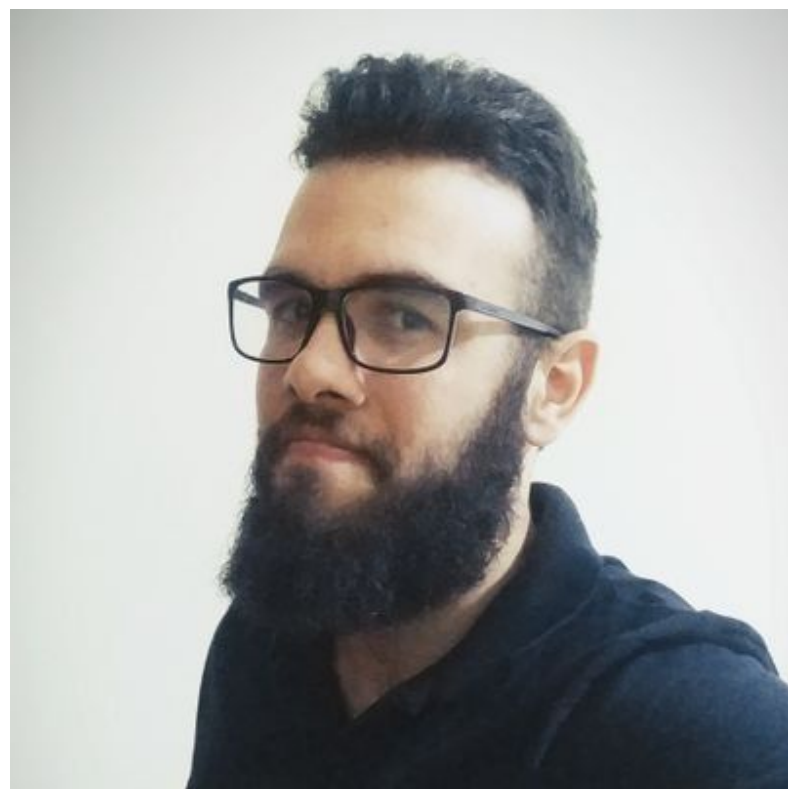
Flag image

Close





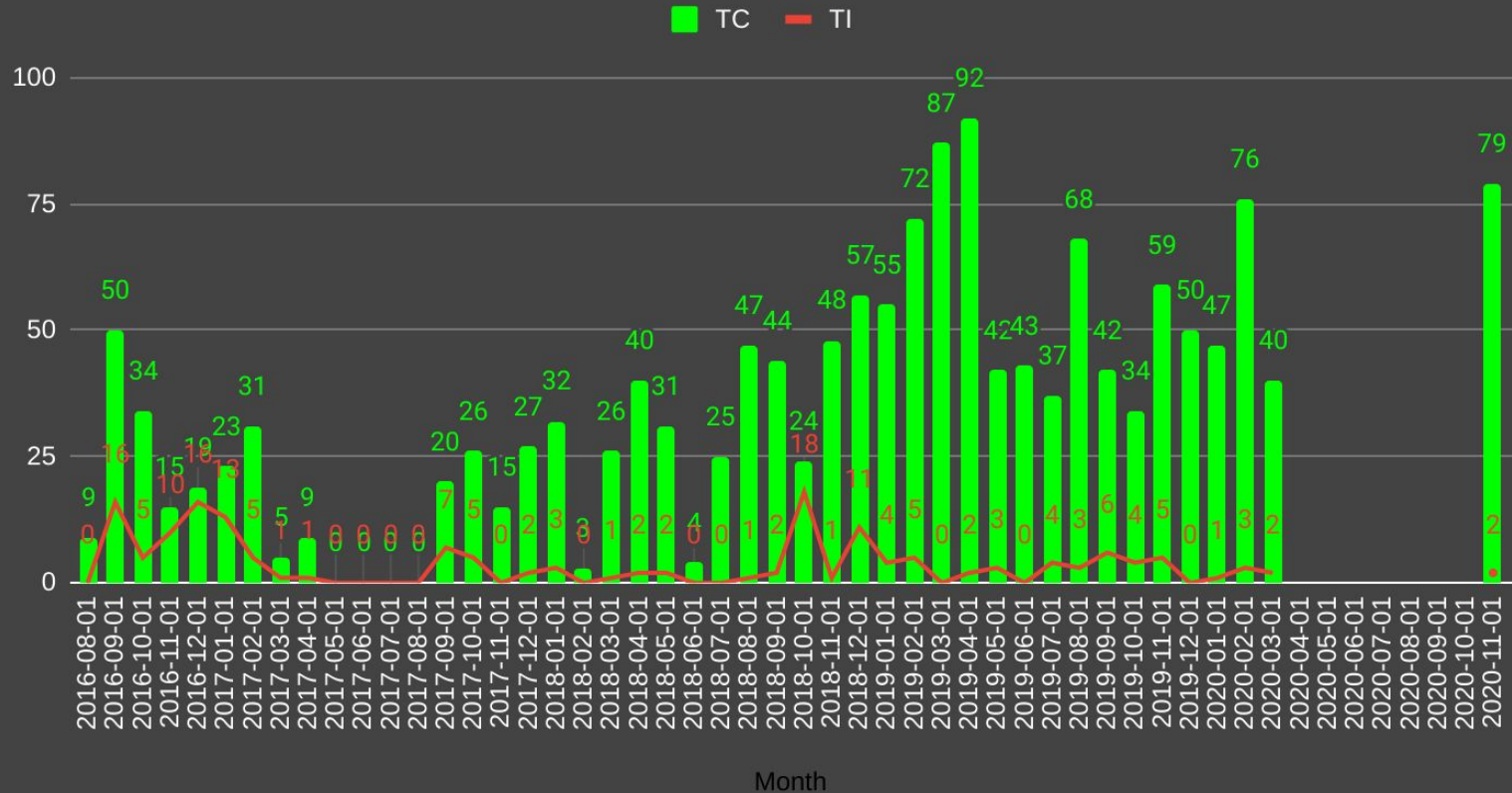
The delivery



The road

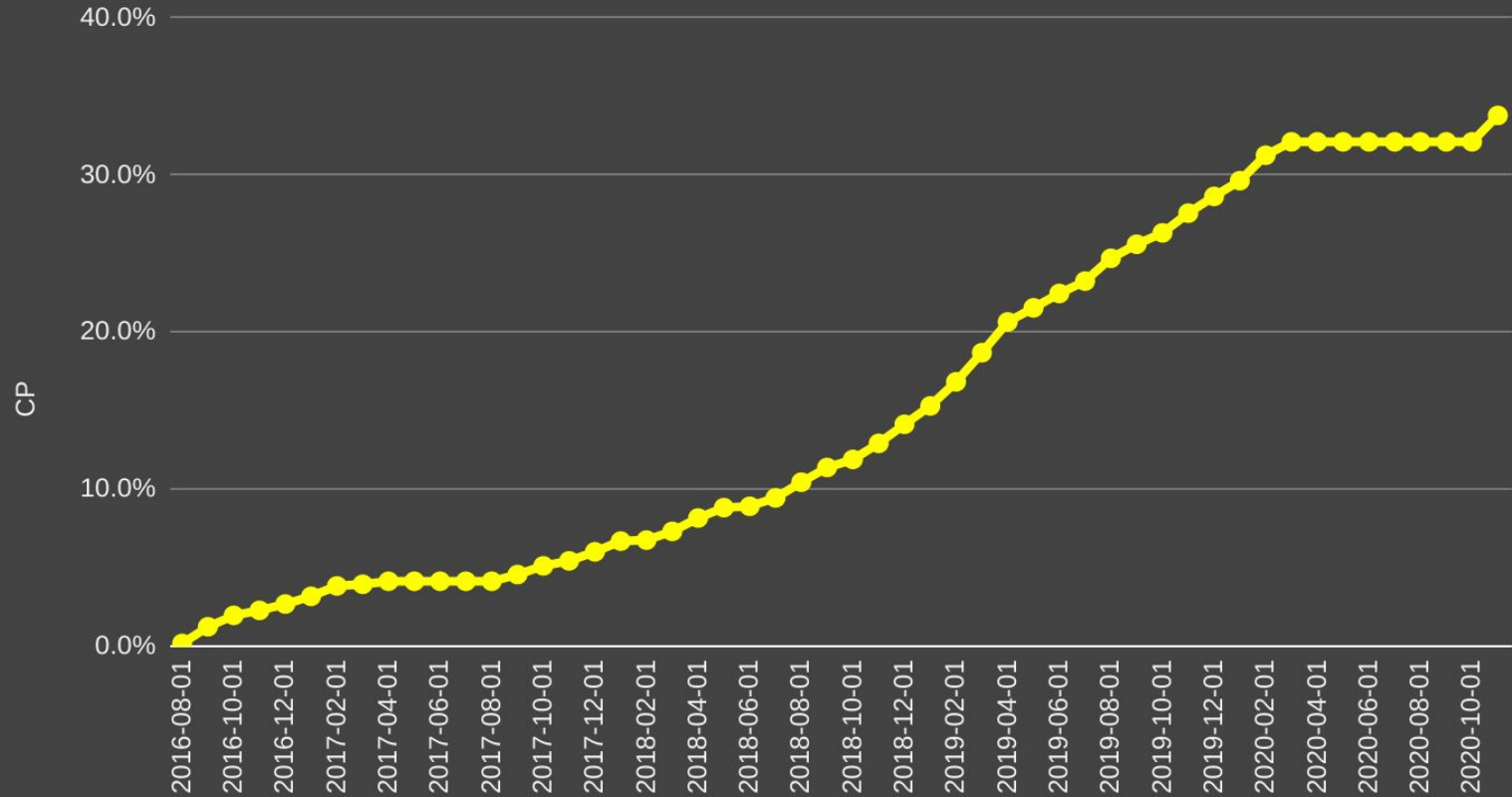
S-PLUS progress - Tiles per month

Tiles per month



S-PLUS progress - Completeness

Cumulative completeness



The proposal

Internal Call for Proposals for ToO/Var Observations with T80S

Period: Semesters 2021A and 2021B (February 1, 2021, to January 31, 2022)

Submission deadline: January 20, 2021

Total time available: 48 hours (24 per semester) of photometric time and (estimated) 40 nights (20 per semester) of non-photometric time for the year 2021

Rationale

As discussed in recent collaboration meetings and telecons, there was a need to rethink the strategy for the low- and high cadence variability (Var) surveys. At the same time, we have been searching for an appropriate way to accommodate targets-of-opportunity (ToOs) that are difficult to schedule in advance. ToOs may include the follow-up of gravitational wave events, gamma-ray bursts, supernovae, etc. Here, we announce the new call for members of the S-PLUS collaboration to propose such ToO/Var projects for observations to be taken during the effective year 2021 (from February 1, 2021, to January 31, 2022).

As our main priority is to complete the Main Survey as soon as possible, ToO/Var programs should assume that the observations will be carried out primarily during nights that are not suitable for MS observations (i.e. bright time, seeing $>2.0''$, transparency $<70\%$ or transparency variations $>10\%$). However, programs that require a limited number of photometric nights to complete their scientific goals will receive full consideration (the number of photometric nights available for this purpose will be limited to 3 nights - or 24 observing hours - per semester). Interested

INTERNAL CALL FOR PROPOSALS FOR T80S TOO/VAR OBSERVATIONS - 2021

Period: Semesters 2021A and 2021B (Feb 1, 2021, to Jan 31, 2022)

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Total time available: 48 hours (24 per semester) of photometric time and (estimated) 40 nights (20 per semester) of non-photometric time for the year 2021

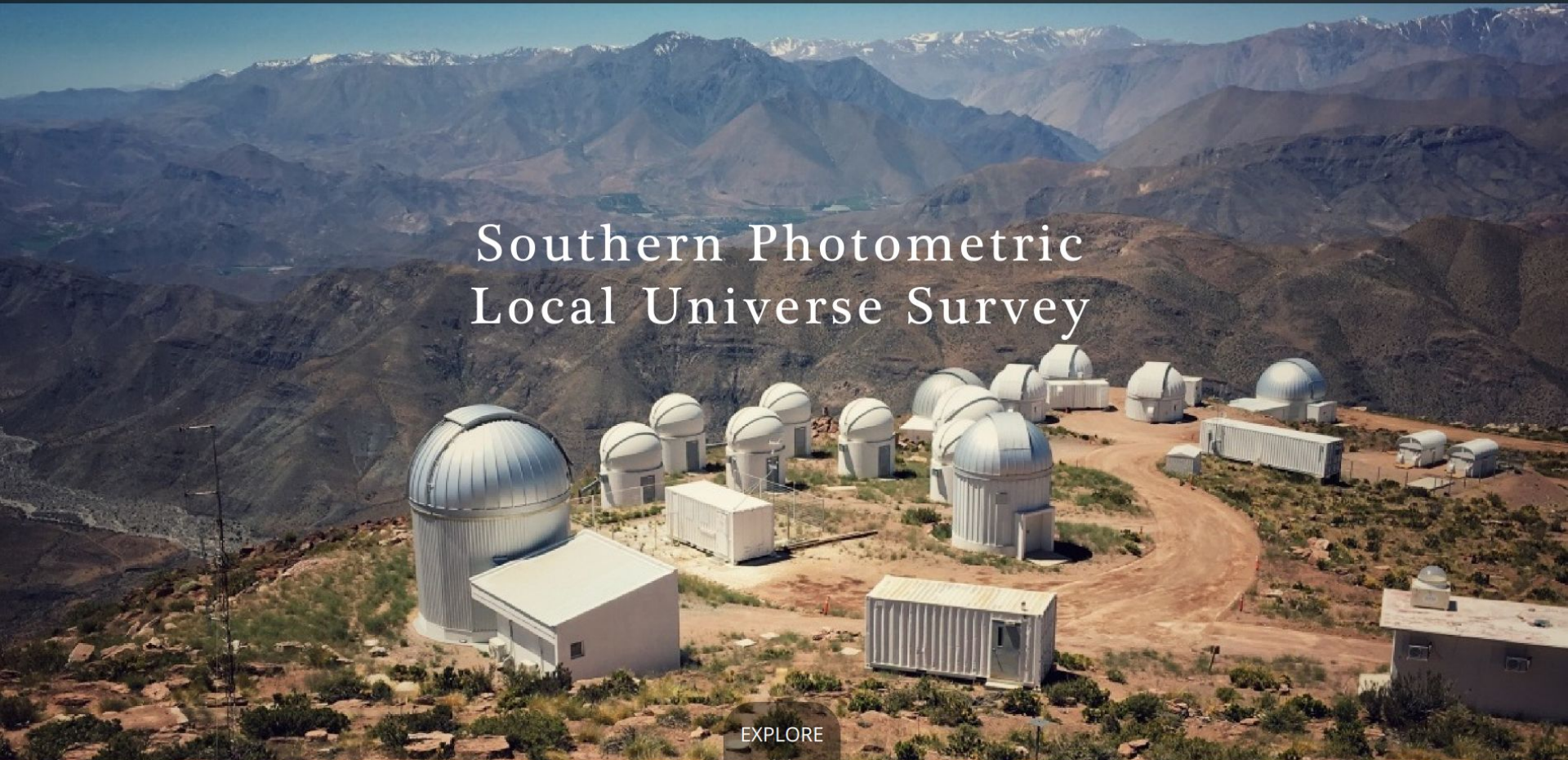
Download this Call for Proposals: [pdf](#)

Rationale

As discussed in recent collaboration meetings and telecons, there was a need to rethink the strategy for the low- and high cadence variability (Var) surveys. At the same time, we have been searching for an appropriate way to accommodate targets-of-opportunity (ToOs) that are difficult to schedule in advance. ToOs may include the follow-up of gravitational wave events, gamma-ray bursts, supernovae, etc. Here, we announce the new call for members of the S-PLUS collaboration to propose such ToO/Var projects for observations to be taken during the effective year 2021 (from February 1, 2021, to January 31, 2022).

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Proposal instructions



Southern Photometric Local Universe Survey

EXPLORE



"That's all Folks!"